DOOSAN Document Transmittal Upper Trishuli-1 HEP (216MW)	Date 2022-03-31	DT No.: UT1-HEP-DHI-PC-D-0020	SHEET 1 OF 1
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SUBJECT	Review Note RN-0109_Structural Calculation of Diversion Tunnel Lining		

S. N.	REVIEW NOTE NO.	REVIEW STATUS	DWG. / DOC. NO.	REV.	DWG. TITLE / DOC. DESCRIPTION	REMARK
1	RN-0109	RR	UT1-C-010-CVL-DC-42005	0A	Structural Calculation of Diversion Tunnel Lining	
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Legend of Review Status
A : APPROVED
AN : APPROVED AS NOTED
RR : RETURN FOR RESUBMISSION
FI : FOR INFORMATION

DHI STAMP

Doosan Heavy Industries & Construction Co. Ltd
DOOSAN
Branch Office Nepal

Issued by DHI

Youngsoo Son

Project Manager

Email: youngsoo.son@doosan.com
Doosan Heavy Industries & Construction Co., Ltd.

Discipline : Civil

UPPER TRISHULI-1 HEP (216MW)

Client	**Nepal Water and Energy Development Company Private Limited**
Owner's Engineer	**Tractebel Engineering GmbH / Jade Consult**

REVIEW NOTE

Contractor	**Doosan Heavy Industries & Construction Co., Ltd.**		
Title of the Document	Diversion Tunnel Lining, structural calculation		
Document No.	UT1-C-010-CVL-DC-42005	Revision	0A
Date of Documents	16.03.2022	Received Date	16.03.2022
Transmittal Form No.	UT1-HEP-DHI-D-0184		
Previous Review Date/Status	N/A	Prev. Review Note No.	N/A
Review Note No.	**RN-0109**	**Present Review Date**	**31.03.2022**
		Present Review Status	**RR**

A: Approved AN: Approved as Noted RR: Returned for Resubmission FI: For Information, only.

General Comments

1. The document has been submitted to the Employer/ OE not respecting time for review between document submission and commencement of the works.

Comments

1. Maximum block length with contraction joints shall be defined.
2. A List of all applicable documents/ standards/ norms shall be shown.
3. The cross section has not a "horseshoe shape" nor a "D shape" but a rectangular shape plus an arc section as already mentioned in various review notes, e. g. RN-0041, RN-0095.
4. As during flood season high flow velocities with abrasive materials will occur also at the tunnel roof, full concrete lining shall be considered. Shotcrete has an irregular and rough surface which provokes scouring, see also RN-0082.
5. Subchapter 2.2: The document number shall be corrected. The indicated drawing number is applicable to the reinforcement drawing of the Diversion Tunnel intake structure.

DISCLAIMER

Any approval will not release the Contractor from any of his obligations under the Contract.

Sebastian Beck, Chief Design Engineer